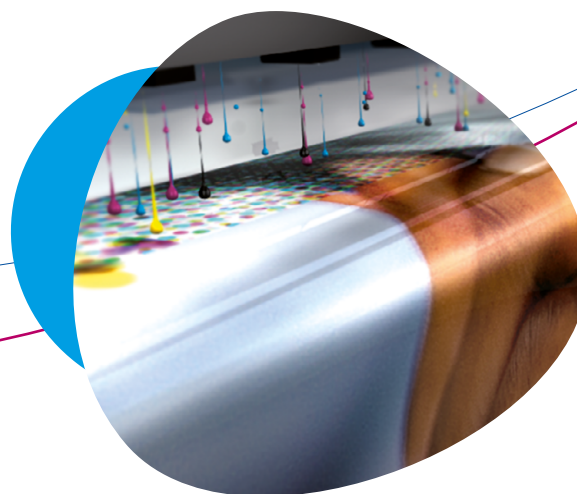


ADDITIVE SELECTION CHART ADDITIVES FOR INKJET INKS

PIGMENT STABILIZING



SCRATCHPROOF

LEVELING



Inkjet inks: „Drop-on-demand (DOD)“ (1/3)

| Application | Aqueous | “Strong” solvent and continuous inkjet | “Eco” solvent (“mild” solvent) | UV, solvent-free |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Pigment stabilization | Cyan: (PB 15:3/PB 15:4) | Cyan: (PB 15:3/PB 15:4) | Cyan: (PB 15:3/PB 15:4) | Cyan: (PB 15:3/PB 15:4) |
| | BYKJET-9152 ● BYKJET-9171 ● BYKJET-9175 ● DISPERBYK-190 ● DISPERBYK-2014 ● BYKJET-9151 ○ BYKJET-9170 ○ BYKJET-9177 ○ | BYKJET-9131 ● BYKJET-9132 ● BYKJET-9151 ● DISPERBYK-161 ○ DISPERBYK-163 ○ | BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2200 ○ DISPERBYK-2205 ○ | BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2030 ● BYKJET-9150 ○ DISPERBYK-168 ○ DISPERBYK-168 TF*1 ○ |
| | Magenta: (e.g., PV 19/PR 122/...) | Magenta: (e.g., PV 19/PR 122/...) | Magenta: (e.g., PV 19/PR 122/...) | Magenta: (e.g., PV 19/PR 122/...) |
| | BYKJET-9170 ● BYKJET-9171 ● BYKJET-9175 ● DISPERBYK-190 ● BYKJET-9151 ○ BYKJET-9177 ○ | BYKJET-9131 ● BYKJET-9132 ○ BYKJET-9152 ○ DISPERBYK-161 ○ DISPERBYK-163 ○ | BYKJET-9152 ● BYKJET-9131 ○ BYKJET-9151 ○ DISPERBYK-2001 ○ | BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2030 ● BYKJET-9150 ○ DISPERBYK-168 ○ DISPERBYK-168 TF*1 ○ |
| | Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...) | Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...) | Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...) | Yellow: (e.g., PY 74/PY 139/PY 151/PY 155/...) |
| | BYKJET-9170 ● BYKJET-9171 ● BYKJET-9175 ● BYKJET-9177 ● DISPERBYK-190 ● BYKJET-9151 ○ | BYKJET-9131 ● BYKJET-9132 ○ BYKJET-9152 ○ | BYKJET-9131 ● BYKJET-9151 ● BYKJET-9152 ○ | BYKJET-9151 ● BYKJET-9152 ● DISPERBYK-2030 ● BYKJET-9150 ○ DISPERBYK-168 ○ DISPERBYK-168 TF*1 ○ |
| Yellow: (PY 150) | Yellow: (PY 150) | Yellow: (PY 150) | Yellow: (PY 150) | |
| BYKJET-9170 ● | DISPERBYK-2200 ● | DISPERBYK-2200 ● | DISPERBYK-168 ● DISPERBYK-168 TF*1 ● | |
| Black: (PBk 7) | Black: (PBk 7) | Black: (PBk 7) | Black: (PBk 7) | |
| BYKJET-9151 ● BYKJET-9175 ● BYKJET-9177 ● DISPERBYK-2014 ● BYKJET-9152 ○ BYKJET-9170 ○ BYKJET-9171 ○ DISPERBYK-190 ○ | BYK-9076 ● BYK-9077 ● BYKJET-9151 ○ BYKJET-9152 ○ DISPERBYK-2200 ○ | BYKJET-9152 ● DISPERBYK-2200 ● BYKJET-9151 ○ DISPERBYK-2155 ○ DISPERBYK-2155 TF*1 ○ | BYKJET-9151 ● DISPERBYK-168 ● DISPERBYK-168 TF*1 ● DISPERBYK-2030 ● BYKJET-9150 ○ BYKJET-9152 ○ | |

● First recommendation ○ Second recommendation

Unless otherwise stated, all silicone-containing additives have a cyclic siloxane content (D4, D5, D6) of less than 0.1 % each.

*1 (Organo) Tin-free version: Future-oriented variant of the original product. Originals are still available.

*2 Content of cyclic siloxanes ≥ 0.1 %.



Inkjet inks: „Drop-on-demand (DOD)“ (2/3)

| Application | Aqueous | “Strong” solvent and continuous inkjet | “Eco” solvent (“mild” solvent) | UV, solvent-free |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Pigment stabilization | White: (PW 6) BYKJET-9175 ● DISPERBYK-2010 ● DISPERBYK-2018 ● DISPERBYK-2019 ● DISPERBYK-190 ○ | White: (PW 6) DISPERBYK-111 ● DISPERBYK-110 ○ DISPERBYK-118 ○ | White: (PW 6) DISPERBYK-2200 ● DISPERBYK-111 ○ DISPERBYK-2152 ○ | White: (PW 6) DISPERBYK-111 ● DISPERBYK-2152 ● DISPERBYK-2205 ○ |
| | Green/orange: (e.g., PG 7/PG 36/PO 34/PO 43/...) | Green/orange: (e.g., PG 7/PG 36/PO 34/PO 43/...) | Green/orange: (e.g., PG 7/PG 36/PO 34/PO 43/...) | Green/orange: (e.g., PG 7/PG 36/PO 34/PO 43/...) |
| | BYKJET-9171 ● BYKJET-9177 ● DISPERBYK-190 ○ | | | |
| Leveling | BYK-3455 ● BYK-3456 ○ | BYK-361 N ● BYK-315 N ○ | BYK-361 N ● BYK-315 N ○ | BYK-361 N ● BYK-3455 ○ BYK-3456 ○ BYK-UV 3530*2 ○ |
| Substrate wetting (reduction of static surface tension) | BYK-348 ● BYK-3420 ● BYK-3450 ● BYK-3451 ● BYK-3455 ○ BYK-3456 ○ | BYK-333 ● BYK-378*2/BYK-3764 ○ BYK-379 ○ | BYK-333 ● BYK-378*2/BYK-3764 ● BYK-379 ● BYK-3550 ○ BYK-3760 ○ | BYK-UV 3530*2 ● BYK-UV 3575*2 ● BYK-3760 ○ BYK-UV 3500*2 ○ BYK-UV 3505 ○ |
| Drop formation (reduction of dynamic surface tension) | BYK-DYNWET 800 ● BYK-DYNWET 810 ● BYK-3400 ○ BYK-3410 ○ BYK-3455 ○ BYK-3456 ○ | | | |

● First recommendation ○ Second recommendation

Unless otherwise stated, all silicone-containing additives have a cyclic siloxane content (D4, D5, D6) of less than 0.1 % each.

*1 (Organo) Tin-free version: Future-oriented variant of the original product. Originals are still available. *2 Content of cyclic siloxanes ≥ 0.1 %.



Inkjet inks: „Drop-on-demand (DOD)“ (3/3)

| Application | Aqueous | “Strong” solvent and continuous inkjet | “Eco” solvent (“mild” solvent) | UV, solvent-free |
|--------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Surface slip | BYK-333 ● BYK-378 ^{*2} /BYK-3764 ● BYK-379 ● | BYK-333 ● BYK-378 ^{*2} /BYK-3764 ● BYK-379 ● | BYK-333 ● BYK-378 ^{*2} /BYK-3764 ● BYK-379 ● BYK-3760 ○ | BYK-378 ^{*2} /BYK-3764 ● BYK-379 ● BYK-UV 3500 ^{*2} ● BYK-UV 3505 ● BYK-3760 ○ BYK-UV 3575 ^{*2} ○ |
| Scratch resistance | AQUACER 513 ● AQUACER 530 ● AQUACER 593 ● HORDAMER PE 03 ● AQUACER 531 ○ | | | NANOBYK-3605 ● |
| Defoaming | BYK-019 ^{*2} /BYK-1709 ● BYK-028 ○ BYK-1770 ○ | | | BYK-1790 ● BYK-1791 ○ BYK-1794 ○ BYK-A 535 ○ |
| Humectant | BYKETOL-PC ● | | | |

● First recommendation ○ Second recommendation

Unless otherwise stated, all silicone-containing additives have a cyclic siloxane content (D4, D5, D6) of less than 0.1 % each.

*1 (Organo) Tin-free version: Future-oriented variant of the original product. Originals are still available.

*2 Content of cyclic siloxanes ≥ 0.1 %.



Inkjet inks for ceramic substrates

| Application | DOD, solvent-borne | Digital glaze (aqueous) |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Pigment stabilization | Low polar: BYKJET-9142 ● DISPERBYK-106 ● DISPERBYK-2157 ● ANTI-TERRA-U 100 ○ | DISPERBYK-2010 ● DISPERBYK-2015 ● DISPERBYK-2018 ● DISPERBYK-2019 ● |
| | Middle to high polar: DISPERBYK-180 ● BYKJET-9133 ○ BYKJET-9151 ○ DISPERBYK-111 ○ DISPERBYK-145 ○ | |
| Substrate wetting (static surface tension control) | BYK-333 ● BYK-307* ³ /BYK-3762 ○ BYK-378* ³ /BYK-3764 ○ BYK-379 ○ | BYK-348 ● BYK-3450 ● BYK-3451 ● BYK-DYNWET 800 ● BYK-DYNWET 810 ● |

● First recommendation ○ Second recommendation

Unless otherwise stated, all silicone-containing additives have a cyclic siloxane content (D4, D5, D6) of less than 0.1 % each.

*³ Content of cyclic siloxanes ≥ 0.1 %.

For more products regarding ceramic inkjet inks please contact graphicarts.byk@altana.com.

Disperse dyes

e. g. disperse red 60, disperse yellow 54, disperse blue 3599

| Application | Disperse dyes |
|-----------------------|------------------------------------------------------------------------------------------------------------|
| Pigment stabilization | BYKJET-9171 ● BYKJET-9175 ● DISPERBYK-190 ● DISPERBYK-2015 ● BYKJET-9152 ○ DISPERBYK-2010 ○ |
| Substrate wetting | BYK-3410 ● BYK-DYNWET 800 ● BYK-DYNWET 810 ● BYK-348 ○ BYK-3455 ○ |

● First recommendation ○ Second recommendation

For more products for the use in disperse dyes, please contact graphicarts.byk@altana.com.

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